1987

Nebraska Summary: S025 John Deere 2355

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SUMMARY OF OECD TEST 1095—NEBRASKA SUMMARY 025
JOHN DEERE 2355 DIESEL
8 SPEED
(COLLAR SHIFT)

POWER TAKE-OFF PERFORMANCE

Power HP *(kW)*	Crank shaft speed rpm	Fuel Consumption Gal/hr *(l/h)*	lb/hp.hr *(kg/kW.h)*	Hp.hr/gal *(kW.h/l)*	Mean Atmospheric Conditions
MAXIMUM POWER AND FUEL CONSUMPTION					
Rated Engine Speed—(PTO speed—567 rpm)					
55.9 *(41.7)*	2500	3.43 *(12.98)*	0.427 *(0.260)*	16.34 *(3.22)*	
Standard Power Take-off Speed (540 rpm)					
54.7 *(40.8)*	2382	3.28 *(12.42)*	0.418 *(0.254)*	16.70 *(3.29)*	
VARYING POWER AND FUEL CONSUMPTION					Air temperature
55.9 *(41.7)*	2500	3.43 *(12.98)*	0.427 *(0.260)*	16.34 *(3.22)*	82°F *(28°C)*
48.4 *(36.1)*	2544	3.09 *(11.71)*	0.446 *(0.271)*	15.63 *(3.08)*	
36.6 *(27.3)*	2566	2.60 *(9.85)*	0.495 *(0.301)*	14.11 *(2.78)*	Relative humidity
24.5 *(18.3)*	2576	2.13 *(8.07)*	0.607 *(0.369)*	11.47 *(2.26)*	45%
12.3 *(9.2)*	2592	1.68 *(6.35)*	0.947 *(0.576)*	7.36 *(1.45)*	Barometer
....	2616	1.23 *(4.66)*	....	....	29.41″ Hg *(99.3 kPa)*

Maximum Torque 141 lb. ft *(191 Nm)* @ 1616 RPM
Maximum Torque Rise 20%

DRAWBAR PERFORMANCE
FUEL CONSUMPTION CHARACTERISTICS

Power Hp *(kW)*	Drawbar pull *(kN)*	Speed mph *(km/h)*	Crank-shaft speed rpm	Slip %	Fuel Consumption lb/hp.hr *(kg/kW.h)*	Hp.hr/gal *(kW.h/l)*	Temp.°F *(°C)* cool-ing med	Air dry bulb	Barom. inch Hg *(kPa)*
Maximum Power 6th (2 II) Gear									
46.7 *(34.8)*	2140 *(9.53)*	8.17 *(13.14)*	2501	4.6	0.513 *(0.312)*	13.81 *(2.72)*	178 *(81)*	70 *(21)*	29.26 *(98.8)*
75% of Pull at Maximum Power 6th (2 II) Gear									
36.5 *(27.2)*	1620 *(7.20)*	8.46 *(13.61)*	2559	3.4	0.561 *(0.341)*	12.64 *(2.49)*	176 *(80)*	70 *(21)*	29.26 *(98.8)*
50% of Pull at Maximum Power 6th (2 II) Gear									
24.8 *(18.5)*	1080 *(4.80)*	8.61 *(13.85)*	2574	2.3	0.676 *(0.411)*	10.51 *(2.07)*	176 *(80)*	70 *(21)*	29.26 *(98.8)*
75% of Pull at Reduced Engine Speed 7th (3 II) Gear									
36.5 *(27.2)*	1605 *(7.13)*	8.52 *(13.71)*	1740	3.4	0.477 *(0.290)*	14.87 *(2.93)*	176 *(80)*	70 *(21)*	29.26 *(98.8)*
50% of Pull at Reduced Engine Speed 7th (3 II) Gear									
24.5 *(18.3)*	1075 *(4.79)*	8.53 *(13.73)*	1721	2.2	0.529 *(0.322)*	13.40 *(2.64)*	176 *(80)*	70 *(21)*	29.26 *(98.8)*
MAXIMUM POWER IN SELECTED GEARS									
2nd Gear (2 I)									
31.5 *(23.5)*	6195 *(27.55)*	1.91 *(3.07)*	2568	15.0	0.638 *(0.388)*	11.12 *(2.19)*	172 *(78)*	68 *(20)*	29.26 *(98.8)*
3rd Gear (3 I)									
42.8 *(31.9)*	5740 *(25.54)*	2.80 *(4.50)*	2497	13.8	0.564 *(0.343)*	12.54 *(2.47)*	178 *(81)*	68 *(20)*	29.26 *(98.8)*
4th Gear (4 I)									
44.8 *(33.4)*	4085 *(18.18)*	4.11 *(6.62)*	2501	9.2	0.538 *(0.327)*	13.15 *(2.59)*	178 *(81)*	70 *(21)*	29.26 *(98.8)*
5th Gear (1 II)									
45.9 *(34.2)*	3075 *(13.68)*	5.59 *(8.99)*	2499	6.7	0.526 *(0.320)*	13.50 *(2.66)*	176 *(80)*	70 *(21)*	29.26 *(98.8)*
6th Gear (2 II)									
46.7 *(34.8)*	2140 *(9.53)*	8.17 *(13.14)*	2501	4.6	0.513 *(0.312)*	13.81 *(2.72)*	178 *(81)*	70 *(21)*	29.26 *(98.8)*

Location of Test: DLG Testing Station for Agriltural Machinery, Max-Eyth-Weg 1 D-6114 Grosz-Umstadt, West Germany

Dates of Test: July to August, 1987

Manufacturer: John Deere Werke Mannheim D-6800 Mannheim, West Germany

FUEL AND OIL: Fuel No. 2 Diesel **Cetane No.** NA **Specific gravity converted to 60°/60°F *(15°/15°C)*** 0.838 **Fuel weight** 6.98 lbs/gal *(0.836 kg/l)* **Oil SAE** 15W40 **Oil Consumption for 10 hours** NA **Transmission lubricant** John Deere Renogear Hydro J 20A

ENGINE: Make John Deere Diesel **Type** four cylinder vertical **Serial No.** CD 4.239 D 732 696 **Crankshaft** lengthwise **Rated engine speed** 2500 **Bore and stroke** 4.19″ × 4.33″ *(106.5 mm × 110 mm)* **Compression ratio** 17.8 to 1 **Displacement** 239 cu in *(3920 ml)* **Starting system** 12 volt **Lubrication** pressure **Air cleaner** two paper elements **Oil filter** one full flow cartridge **Oil cooler** engine coolant heat exchanger for crankcase oil, radiator for hydraulic and transmission oil **Fuel filter** one paper element **Muffler** underhood **Exhaust** vertical **Cooling medium temperature control** thermostat.

CHASSIS: Type standard **Serial No.** 610 679 **Tread width** rear 59.8″ *(1520 mm)* to 96.1″ *(2440 mm)* front 57.1″ *(1450 mm)* to 78.7″ *(2000 mm)* **Wheel base** 89.7″ *(2279 mm)* **Hydraulic control system** direct engine drive **Transmission** selective gear fixed ratio **Nominal travel speeds mph *(km/h)*** first 1.52 *(2.45)* second 2.17 *(3.49)* third 3.22 *(5.18)* fourth 4.51 *(7.25)* fifth 5.97 *(9.60)* sixth 8.52 *(13.71)* seventh 12.64 *(20.34)* eighth 17.67 *(28.44)* reverse 1.76 *(2.84)*, 2.52 *(4.06)*, 3.74 *(6.02)*, 5.23 *(8.42)* **Clutch** single dry disc operated by foot pedal **Brake** single wet disc hydraulically operated by two foot pedals which can be locked together **Steering** power assist **Power take-off** 540 rpm at 2382 engine rpm **Unladen tractor mass** 6780 lb *(3075 kg)*.

REPAIRS AND ADJUSTMENTS: No repairs or adjustments.

TRACTOR SOUND LEVEL WITHOUT CAB	dB(A)
Maximum sound level	93.5
Bystander	NA

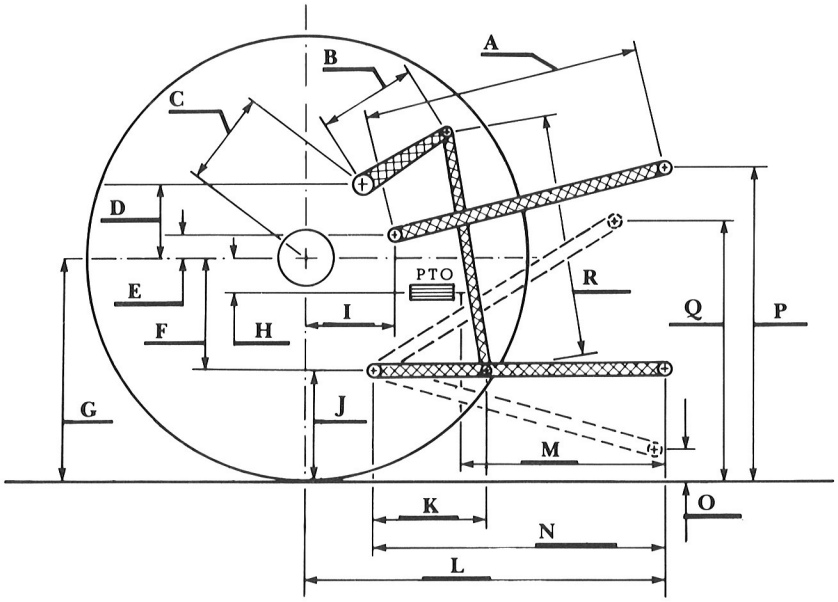
TIRES, BALLAST AND WEIGHT		Tested Without Ballast
Rear Tires	—No., size, ply & psi *(kPa)*	Two 16.9-30; 6; 14 *(100)*
Front Tires	—No., size, ply & psi *(kPa)*	Two 7.50-16; 6; 26 *(180)*
Height of Drawbar		19.7 in *(500 mm)*
Static Weight	—Rear	4770 lb *(2165 kg)*
	—Front	2195 lb *(995 kg)*
	—Total	6965 lb *(3160 kg)*

THREE POINT HITCH PERFORMANCE (STATIC TEST)

CATEGORY: II
Quick Attach: None

Maximum Force Exerted Through Whole Range:	3125 lbs *(13.90 kN)*
i) Opening pressure of relief valve:	NA
Sustained pressure with pump stalled:	2320 psi *(160 Bar)*
ii) Pump delivery rate at minimum pressure:	14.7 GPM *(55.5 l/min)*
iii) Pump delivery rate at maximum hydraulic power:	13.7 GPM *(51.9 l/min)*
Delivery pressure:	1915 psi *(132 Bar)*
Power:	15.3 Hp *(11.4 kW)*

HITCH DIMENSIONS AS TESTED—NO LOAD



	inch	*mm*
A	26.6	*675*
B	10.0	*254*
C	10.9	*277*
D	10.9	*277*
E	6.4	*163*
F	7.9	*200*
G	27.4	*695*
H	2.8	*71*
I	12.6	*321*
J	19.5	*495*
K	18.3	*465*
L	38.3	*973*
M	21.7	*551*
N	33.8	*858*
O	7.9	*200*
P	39.6	*1005*
Q	31.8	*808*
R	26.4	*670*

REMARKS: All test results were determined from observed data obtained in accordance with official OECD test procedures. This tractor did not meet manufacturers claim of 3269 lbs *(1483 kg)* lift capacity. The performance figures on this summary are taken from a test conducted under the OECD restricted standard test code procedure.

We, the undersigned, certify that this is a true summary of data from OECD Report No. **1095,** Nebraska Summary 025, June 21, 1988.

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